

Amendments to the Specification

In the Specification:

Please amend the paragraphs as follows:

[34] When the calculation of the correction angle is finished, a variation of the correction angle is calculated by subtracting the previously map-matched correction angle from the current correction angle obtained in step 210 (S212). In this way, one can detect how much the current position has been displaced.

[44] To be short, as illustrated in Figs. 3(a) and 3(b), if a first GP[[D]]S/DR position 301 and a first MM position 311 are plotted on a Cartesian coordinate system, it corresponds to the previously map-matched displacement value (x1, y1) 331. Similarly, if a newly map-matched GPS/DR position 302 and a second MM position 312 are plotted on the Cartesian coordinate system, it corresponds to the displacement-corrected value (x2, y2) 332 that is obtained from the previous map matching using the current correction angle. Here, the displacement value from the previous map matching (x1, y1) coincides with the point 331, and the new displacement value (x2, y2) coincides with the point 312.

[46] Then the sum of a new GPS value with the absolute correction distance (d) obtained previously is designated as a new GPS/DR. Fig. 4 illustrates GPS/DR positions corrected by using the previous map matching value within a search range 400 while an object is moving. Using GPS/DR position measurements 401, 403, and 405 and map matched value 402, 404 and 406, it is possible to obtain a new GPS/DR value 407 that is obtained by adding a new GPS/DR value 403 to a previous absolute correction distance (d). A spot 408 can be obtained using the same method.